

**IN THE CLAIMS:**

Claims 1-70 Canceled

71. (Previously presented) An ozone-producing air purifier, comprising:  
a longitudinal axis;  
a first cylinder having a first cylinder sidewall, having a first window in the first cylinder sidewall, and being fixedly disposed about the longitudinal axis;  
a second cylinder having a second cylinder sidewall, having a second window in the second cylinder sidewall, and being rotatably disposed about the longitudinal axis; and  
a UV lamp that generates ozone-producing radiation when energized, the UV lamp being disposed along the longitudinal axis and within the first and second cylinders;  
where rotation of the second cylinder changes an amount of overlap of the first and second windows, the changing of the amount of window overlap thereby adjusting an amount of ozone-producing radiation being emitted through the overlap.
72. (Previously presented) The ozone-producing air purifier of claim 71, further comprising a shaft affixed at its proximal end to the second cylinder, the shaft extending in parallel with the longitudinal axis.
73. (Previously presented) The ozone-producing air purifier of claim 72, further comprising a knob affixed to a distal end of the shaft, wherein rotation of the knob effects the rotation of the second cylinder.
74. (Previously presented) The ozone-producing air purifier of claim 71, further comprising:  
a base; and  
a first lamp holder structured for securing the UV lamp to the base.

75. (Previously presented) The ozone-producing air purifier of claim 74, wherein the base is structured for being mounted into an HVAC duct.

76. (Previously presented) The ozone-producing air purifier of claim 74, further comprising:  
a germicidal lamp; and,  
a second lamp holder structured for securing the germicidal lamp to the base.

77. (Currently amended) ~~An~~ The ozone-producing air purifier ~~[[,]]~~ of claim 71 comprising:  
~~a longitudinal axis;~~  
~~a first cylinder having a first cylinder sidewall, having a first window in the first cylinder sidewall, and being fixedly disposed about the longitudinal axis;~~  
~~a second cylinder having a second cylinder sidewall, having a second window in the second cylinder sidewall, and being rotatably disposed about the longitudinal axis, wherein at least one of the first and second window being is a tapered slot ;and~~  
~~a UV lamp that generates ozone-producing radiation when energized, the UV lamp being disposed along the longitudinal axis and within the first and second cylinders;~~  
~~where rotation of the second cylinder changes an amount of overlap of the first and second windows, the changing of the amount of window overlap thereby adjusting an amount of ozone-producing radiation being emitted through the overlap.~~

Claims 78-79            Canceled

80. (Previously presented) The ozone-producing air purifier of claim 77, wherein at least one tapered slot has a non-linear taper.

81. (Previously presented) The ozone-producing air purifier of claim 77, wherein the second cylinder is disposed within the first cylinder.

Claims 82-87            Canceled

88.    (Currently amended) An ozone-producing air purifier, comprising:

an [[airflow-preventing]] enclosure having a longitudinal axis and including coaxial first and second cylinders disposed about the longitudinal axis, the first cylinder being fixedly disposed, having a first cylinder sidewall and having a first window in the first cylinder sidewall, the second cylinder being rotatably disposed, having a second cylinder sidewall and having a second window in the second cylinder sidewall; and

a UV lamp that generates ozone-producing radiation when energized, the lamp being disposed within the [[airflow-preventing]] enclosure along the longitudinal axis;

wherein rotation of the second cylinder changes an amount of overlap of the first and second windows, the overlap having a tapered shape, the overlap being confined within an arc of approximately one radian about the longitudinal axis, or less, thereby substantially preventing airflow through an interior portion of the enclosure, and

wherein the [[airflow-preventing]] enclosure completely encloses the UV lamp except that the overlap directly exposes a portion of the UV lamp through any such overlap.

89.    (Currently amended) The ozone-producing air purifier of claim 88, further comprising :

an extension having a proximal end and a distal end, the extension being affixed at its proximal end to the second cylinder, the extension extending in parallel with the longitudinal axis, and being radially offset from the longitudinal axis ; and

a knob affixed to the distal end of the extension.

Claims 90-91            Canceled

92. (Currently amended) The ozone-producing air purifier of claim 89, further comprising a ~~plate surface~~ having an arcuate slot having an arc, wherein the distal end of the extension extends through the arcuate slot, and wherein such distal end of the extension moves along the arc as the ~~second cylinder rotates~~.

93. (Previously presented) The ozone-producing air purifier of claim 88, further comprising an electrical connector for supplying electricity to the UV lamp, the electrical connector being removable and independent of the first and second cylinders.

94. (Currently amended) The ozone-producing air purifier of claim 88, further comprising:  
a ~~an~~ electrical connector for supplying electricity to, and being detachable from, the UV lamp;

a ~~chassis~~ base plate structured for mounting the first cylinder thereto; and  
an attachment structure mounted to the ~~chassis~~ base plate for securely holding the UV lamp within the first and second cylinders.

95. (Currently amended) An ozone-producing air purifier for producing ozone in a surrounding airflow, comprising:

a UV lamp that generates ozone-producing radiation when energized, the UV lamp having a longitudinal axis;

an airflow-preventing enclosure completely covering the UV lamp except for a single, variable opening in portion of the airflow-preventing enclosure, thereby substantially preventing the airflow from flowing through the airflow-preventing enclosure, the airflow-preventing enclosure comprising:

a first cylinder having a first cylinder sidewall, having a first window in the first cylinder sidewall, and being fixedly disposed about the longitudinal axis; and,

a second cylinder having a second cylinder sidewall, having a second window in the second cylinder sidewall, and being rotatably disposed about the longitudinal axis; and

a shaft affixed at its proximal end to the second cylinder, the shaft extending in parallel with the longitudinal axis, where rotation of the shaft effects rotation of the second cylinder and correspondingly changes an amount of overlap of the first and second windows, such overlap effecting the variable opening portion, the overlap having a tapered shape.

96. (Previously presented) The ozone-producing air purifier of claim 93, further comprising a plate structured for securely attaching the ozone-producing air purifier to a wall of an airflow passageway.

97. (New) An ozone-producing air purifier for producing ozone in a surrounding airflow, comprising:

a UV lamp that emits ozone-producing radiation when energized, the lamp having a longitudinal axis; and

a radiation-trapping enclosure for completely enclosing the UV lamp and isolating the UV lamp from the surrounding airflow, the radiation-trapping enclosure including coaxial first and second cylinders disposed about the longitudinal axis, the first cylinder being fixedly disposed outwardly of the second cylinder, having a first cylinder sidewall and having a first window in the first cylinder sidewall, the second cylinder being rotatably disposed inwardly of the first cylinder, having a second cylinder sidewall and having a second window in the second cylinder sidewall, rotation of the second cylinder changing an amount of overlap of the first and second windows, the overlap having a tapered shape,

wherein the changing of the amount of overlap changes an amount of ozone-producing radiation being emitted into the surrounding airflow via the overlap.

98. (New) The ozone-producing air purifier of claim 97, further comprising:

an extension having a proximal end and a distal end, the extension being affixed at its proximal end to the second cylinder, the extension extending in parallel with the longitudinal axis, and being radially offset from the longitudinal axis; and

a knob affixed to the distal end of the extension.

99. (New) The ozone-producing air purifier of claim 98, further comprising a user-interface surface having an arcuate slot, wherein the distal end of the extension extends through the arcuate slot and moves along the arcuate slot as the second cylinder rotates.

100. (New) The ozone-producing air purifier of claim 97, further comprising:  
a plate structured for mounting the first cylinder thereto; and  
an attachment structure mounted to the plate for securely holding the UV lamp within the first and second cylinders.

101. (New) In a forced air type HVAC system having ductwork for moving an airflow and having a UV lamp, of a type for emitting ozone-producing radiation, disposed at least partly within the ductwork, the improvement comprising the UV lamp being completely enclosed within a UV compartment separated from surrounding airflow of the ductwork, the UV compartment consisting essentially of a coaxial pair of cylinders, each cylinder having a window, rotation of a rotating one of the pair of cylinders with respect to a fixed one of the pair of cylinders creating a taper-shaped overlap of the pair of windows, the overlap effecting a radiation emission path, for the ozone-producing radiation, from the UV compartment to the surrounding airflow.

102. (New) The HVAC system of claim 101, further comprising:  
an extension having a proximal end and a distal end, the extension being affixed at its proximal end to the rotating cylinder, the extension extending in parallel with the longitudinal axis, and being radially offset from the longitudinal axis;  
a user-interface surface having an arcuate slot, wherein the distal end of the extension extends through the arcuate slot and moves along the arcuate slot as the rotating cylinder rotates;  
and

a knob affixed to the distal end of the extension.

103. (New) The HVAC system of claim 101, further comprising:

a plate structured for mounting the fixed cylinder thereto and for being abuttingly attached to a wall of the ductwork; and

an attachment structure mounted to the plate for securely holding the UV lamp within the cylinders.

104. (New) The HVAC system of claim 101, further comprising an electrical connector for supplying electricity to, and being detachable from, the UV lamp.

105. (New) An adjustable UV air purifier for controllably producing ozone in a surrounding airflow of a forced air type HVAC system having ductwork for moving the airflow, comprising:

a UV lamp that emits ozone-producing radiation when energized, the lamp having a longitudinal axis;

a radiation-trapping enclosure for completely enclosing the UV lamp and isolating the UV lamp from the surrounding airflow, the radiation-trapping enclosure including coaxial first and second cylinders disposed about the longitudinal axis, the first cylinder being fixedly disposed outwardly of the second cylinder, having a first cylinder sidewall and having a first window in the first cylinder sidewall, the second cylinder being rotatably disposed inwardly of the first cylinder, having a second cylinder sidewall and having a second window in the second cylinder sidewall, rotation of the second cylinder changing an amount of overlap of the first and second windows, the overlap having a tapered shape, the changing of the amount of overlap correspondingly changing an amount of ozone-producing radiation being emitted into the surrounding airflow via the overlap; and

a knob, coaxial with and connected to the second cylinder, rotation of the knob effecting the rotation of the second cylinder.

106. (New) The adjustable UV air purifier of claim 105, further comprising a user interface surface having an arcuate opening with an arc thereof being coaxial with the knob and cylinders.

107. (New) The adjustable UV air purifier of claim 106, further comprising a connecting member connecting the second cylinder with the knob via the arcuate opening of the user interface surface, the connecting member being parallel to and radially offset from the longitudinal axis.

108. (New) The adjustable UV air purifier of claim 105, wherein the overlap is within an arc of approximately one radian about the longitudinal axis, or less.

109. (New) The adjustable UV air purifier of claim 105, wherein the overlap is formed of only the first and second windows.

110. (New) The adjustable UV air purifier of claim 106, further comprising a plate structured for being attached to a wall of the ductwork so that the radiation-trapping enclosure and UV lamp extend into the airflow, the plate being fixed to the first cylinder.

111. (New) The adjustable UV air purifier of claim 110, wherein the user interface surface is parallel to the plate and is structured for mounting the knob thereon.